

Terminology: Definitions or explanations were offered for certain nomenclatural jargon: nominal genus, junior and senior, objective and subjective, primary and secondary.

A few "do's" and "don't's" that would help in avoiding nomenclatural difficulties and expedite taxonomic work were suggested.

THE PHYLOGENETIC SYSTEM OF THE ORDER PLECOPTERA.

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Animals can be classified in many ways, to serve many purposes and these systems may be altered or abandoned, according to the needs of their users. However, taxonomy is then reduced to a subordinate mean, a file for other disciplines and such taxonomy cannot assist in scientific research.

A more adequate way to treat taxonomy or systematics is as a science of its own, equal in rank to other sciences, with rules and procedures following scientific logic, and nothing else. Under no circumstances may these rules be bent or modified to suit other demands. The aim of such scientific taxonomy is establishment of the one system which evolved in time. Scientific taxonomy attempts to elucidate the genealogical relationships between species and supraspecific taxa of a given time, in the present or in the past. These relationships are represented in unmistakable ways, either in written systems or in cladograms. Each of these two representations can be transformed into the other, without ambiguity or loss of information. Strict monophyly of supraspecific taxa is mandatory, paraphyletic or polyphyletic taxa are not admitted. Such a system has been termed phylogenetic by Hennig (1949).

A brief account of the principles of phylogenetic systematics has been given in English by Hennig (1965). Brundin has also extensively dealt with it several times, e.g. 1966. For those who are critical of the theory of phylogenetic systematics it would be important to know its recent formulation by Schlee (1971), which is without some of the corollaries that have at times been taken to be essentials of the theory.

Unfortunately, the former "evolutionary taxonomists" have started to use the term phylogenetic systematics for their classifications. They even try to refuse the use of the term according to its older definition by Hennig. This is unfortunate, because phylogenetic systems of evolutionary taxonomists lack a clear concept. They are mixtures of "science, most strictly speaking, and of an art" (Simpson, 1961). Therefore, these systems are equivocal and are in fact little more than the usual intuitive taxonomy with evolutionary flavouring, unsuited for scientific work.

The phylogenetic system of Plecoptera (in the sense of Hennig) shown below (Fig. 6), was briefly discussed (for details see Zwick, 1973).

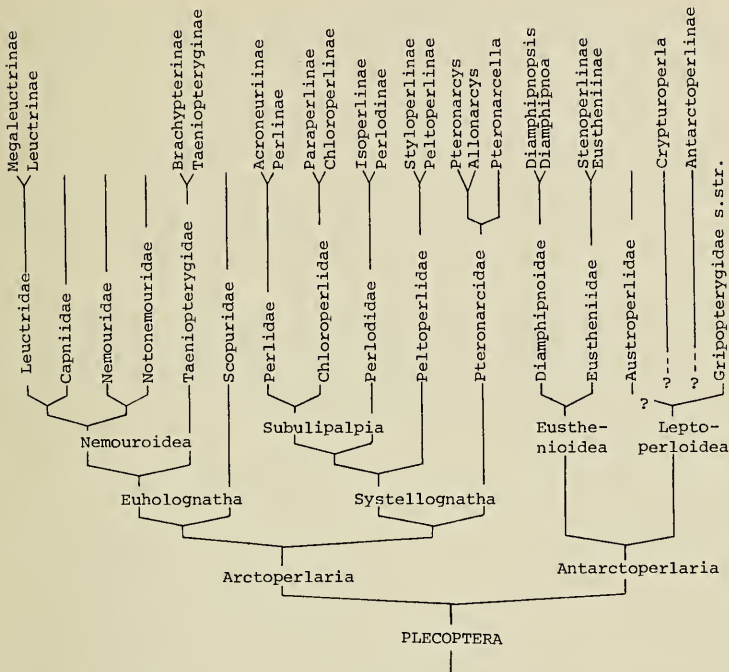


FIG. 6. The phylogenetic system of Plecoptera (from Zwick, 1969, modified).

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NOTES ON THE NOMENCLATURE AND TAXONOMIC GROWTH OF THE PLECOPTERA.

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Students of the Plecoptera are fortunate in having up-to-date catalogues and a systematic compendium of the order in the works of Illies (1966) and Zwick (1973). The literature of few orders of insects is so well indexed and the classification so well revised by the most modern methods.

Order and Suborder	Group	Superfamily	Family
Plecoptera			
Antarctoperlaria		Eusthenioidea	Eustheniidae Diamphipnoidae
		Gripopterygoidea (Leptoperloidea)	Austroperlidae Gripopterygidae Gripopteryginae Leptoperlinae Paragripopteryginae Antarctoperlinae
Arctoperlaria	Systellognatha	(Pteronarcoidea)	Pteronarcyidae
		(Peltoperloidea)	Peltoperlidae
		Perloidea (Subulipalpia)	Perlodidae Perlidae Chloroperlidae
	Euholognatha	Scopuroidea	Scopuridae
		Nemouroidea	Taeniopterygidae Notonemouridae Nemouridae Capniidae Leuctridae

The "Argumentationschema" on p. 2 and the dendrogram on p. 16 of the work by Zwick are to some extent at variance with the classification followed in the catalogue and the systematic index, which is as shown above. The genus *Crypturoperla* is shown in the Schema as of equal rank with the Austroperlidae, but in the catalogue and the systematic index the genus is treated as a member of that family. The Antarctoperlinae are treated in the Schema as of equal rank with the